

Clay County

Municipal Solid Waste Planning Region

2006 Qualitative Review



Tennessee Department of Environment and Conservation
Division of Solid Waste Management
Solid Waste Assistance Programs
401 Church Street, 5th Floor
Nashville, Tennessee 37243

Introduction

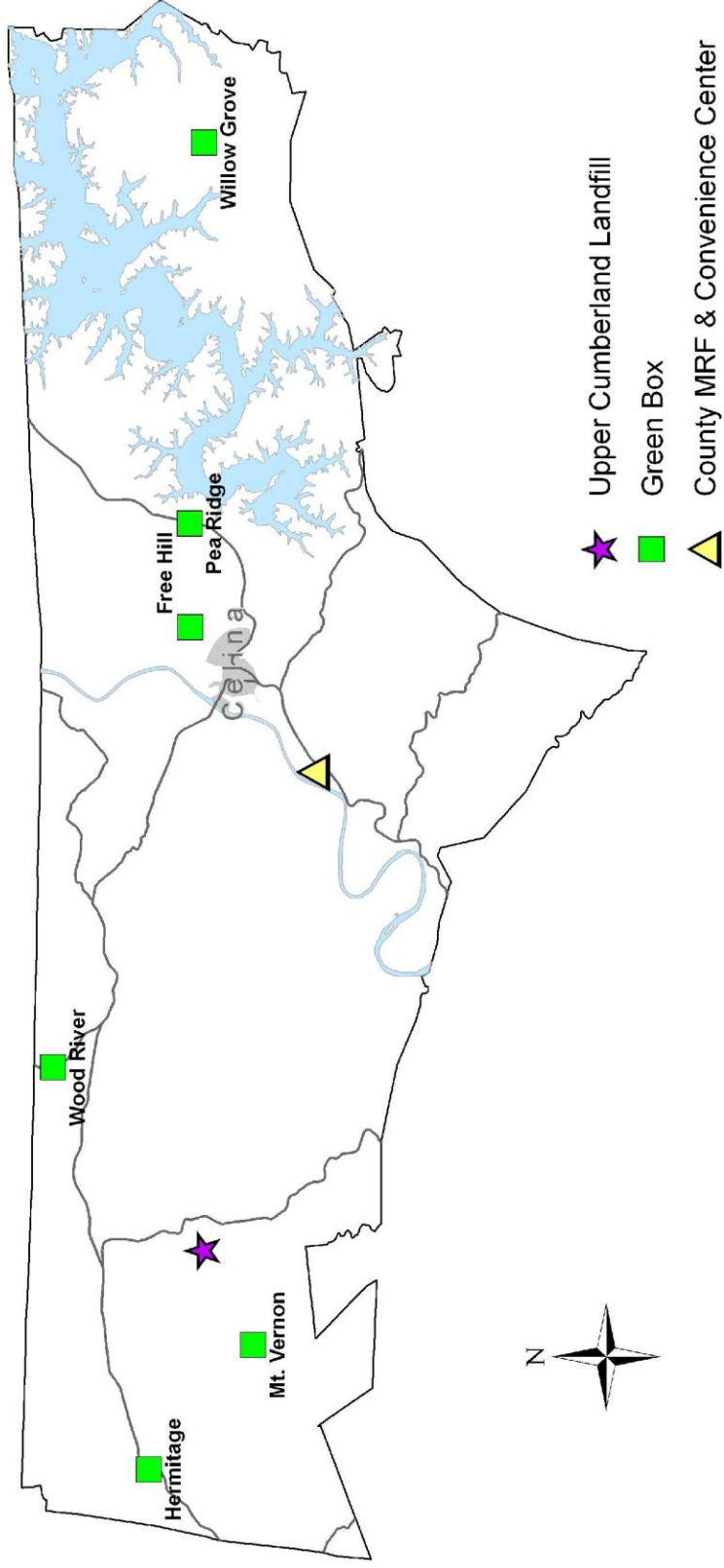
Tennessee's *Solid Waste Management Act of 1991* (SWMA) requires solid waste regions to achieve a twenty-five percent (25%) waste reduction goal for solid waste going into Class I landfills by December 31, 2003. Under T.C.A. § 68-211-861, the basis for determining compliance with this waste reduction goal is based on a per capita reduction measurement that may be adjusted for economic or population trends, or by a qualitative assessment that evaluates whether the region had comparable progress to those of similar regions that made the waste reduction goal based on the per capita methodology. Until 2003 the need to define the qualitative assessment was not necessary since there were no regions out of compliance. After the 2003 reporting period, 34 regions failed to meet the 25% waste reduction goal, which necessitated the promulgation of rules describing the methodology for qualitative assessment of regions failing to meet the per capita base year reduction. These rules became effective August 6, 2006.

The first step in the qualitative assessment process is to determine if the failing region met the waste reduction goal using the real-time methodology. This method is calculated annually by dividing the total amount recycled or diverted from Class I landfills by the total generated waste stream. If the region did not meet the 25% goal through this process, the region is then reviewed in order to determine if a "good faith" effort was made toward compliance and if their programs and solid waste infrastructure are qualitatively equivalent to like regions of similar population and economic characteristics who have achieved the goal.

In 2006, five regions failed to meet the goal by either base year or real-time methods. With a base year reduction of -47% and a real-time comparison of 20%, Clay County Municipal Solid Waste Planning Region was one of those regions. Clay County Municipal Solid Waste Planning Region, along with the four other regions who failed to meet the goal, were compared to regions who met the goal on a base year (per capita) method in 2006 and who have similar population size and economic characteristics. Comparison regions included Cocke, Grainger, Hardeman, Humphreys, Lawrence, Lewis and Van Buren.

On April 1, 2008, Wayne Brashear, Bob Knight, Nick Lytle and Matt Maynard from the Division of Solid Waste Management visited the county and met with County Mayor Dale Reagan and Solid Waste Director Johnny Smith to discuss all facets of the solid waste management program. Visits were made to the convenience center, five of six public collection receptacle or "green box" sites, Upper Cumberland Class I Landfill and the materials recovery facility (MRF). The equipment and facilities at each of those sites were examined and noted. Future facility and equipment needs for the programs were reviewed by staff at time of visit and financial statements were obtained from the county.

Clay County Solid Waste System



As of April 1, 2008

Solid Waste Facilities and Infrastructure

Every county in Tennessee is required by law to provide both a minimum level of waste reduction and also waste collection assurance. The solid waste and recycling collection programs of the Clay County Municipal Solid Waste Planning Region serve a population of 8,055 and an area of 236 square miles. The minimum number of convenience center sites required by state statute, based on Clay County's population, is calculated at one site. The region satisfies these requirements through the following systems:

Clay County operates one convenience center centrally located in the County Industrial Park in the Town of Celina. The location utilizes front-end loader boxes to collect municipal solid waste. After collection and compaction, the municipal solid waste is transported directly to Upper Cumberland Landfill located southwest of Moss, TN. In addition to Upper Cumberland Landfill, private haulers operating in the county occasionally use Volunteer Landfill in Scott County. The county accepts corrugated cardboard (OCC), mixed paper, aluminum cans, electronics, latex paint, used oil, scrap metal, plastic drink containers, scrap tires, glass and lead-acid batteries in addition to the municipal solid waste.



Clay County MRF

Additionally, the county operates six public collection or “green boxes” sites located in the Free Hill, Hermitage, Mt. Vernon, Pea Ridge, Willow Grove and Wood River communities. Each “green box” site consists of several front-end loading boxes for the collection of municipal solid waste. With the exception of Free Hill, recyclables (OCC, scrap metal and newspaper) are also collected at each of the “green box” sites. Several of these sites had fencing to control hours of use, and the site at Pea Ridge was manned.

The region's recycling program has been in existence since September 1998. Operations and management of the program are located at the Clay County Sanitation Department & Material Recovery Facility (MRF) located in the County Industrial Park in

Celina adjacent to the convenience center. Construction of the 10,000 square foot MRF was funded through the Waste Reduction Grant awarded by TDEC in 2005. The MRF provides for collection, processing, storage and marketing of recyclable materials. The commodities collected at the convenience center and “green box” sites are brought to the MRF for processing. In 2006, the region reported the following materials processed at the MRF:

OCC	156 Tons
Plastics	103 Tons
Mixed Paper	65 Tons
Metals	60 Tons

Household items suitable for reuse deposited at the MRF are shipped to The Good Samaritan facility located in Livingston, TN. Collected latex paint is used by the county for various county projects. Banks and schools began office paper recycling in 2004. Brush collected at the MRF is mulched and used on-site to control erosion and sediment from storm water run-off. Thirty commercial businesses participate in the County’s cardboard collection and recycling program provided free of charge. According to the 2006 Solid Waste Origin Report submitted to TDEC, waste originating in Clay County was transported to the Upper Cumberland Landfill located in Clay County and Volunteer Landfill in Scott County.



Mixed Paper Awaiting Baling at MRF

The Town of Celina operates a curbside residential solid waste collection service for residents and subscription service for local businesses. Residents of Celina are also able to utilize all county operated facilities, including the convenience center for recycling services.

The County Solid Waste Department employs a full time solid waste director. By employing a solid waste director, Clay County is able to have a greater level of management over the day-to-day operations of all aspects of their solid waste system. Direct oversight of routes, collection schedules, materials marketing and public education allows the program to operate more efficiently and aids in financial stability. Celina provides for solid waste management through the public works department without a dedicated solid waste director.

Financial Information

T.C.A. § 68-211-874(a) states that each county, solid waste authority and municipality shall account for financial activities related to the management of solid waste in either a special revenue fund or an enterprise fund established expressly for that purpose. The solid waste financial information of Clay County was examined by department staff.

According to the Fiscal Year 2007 Annual Financial Report of Clay County Tennessee performed by the Tennessee Comptroller of the Treasury, in Fiscal Year 2006, the Clay County General Fund loaned \$60,000 to the Solid Waste Fund. In Fiscal Year 2007, an additional \$70,000 was loaned to the Solid Waste Fund because funds were not available to meet current expenditures. On October 1, 2007, the Clay County Commission voted to forgive these notes totaling \$130,000. These financial issues are not due to insolvency, but a lack of adequate budgeting. If this situation persists, future expansion of waste reduction and collection options will be difficult.

Below is a summary of the Fiscal Year Revenues and Expenditures of Clay County:

Expenditures	
Waste Pickup	\$419,998
Other	\$8,259
Total	\$428,257
Revenues	
Local Taxes	\$380,127
Charges for Services	\$61,060
Other Revenues (Including Sale of Recyclables)	\$32,673
State of Tennessee (Grants)	\$4,000
Total	\$477,860

Solid Waste Planning Board

The Solid Waste Management Act states that every solid waste region in the state must appoint a solid waste planning board, composed of representatives of each county and each city which participates in a solid waste planning region. . The Municipal Solid Waste Planning Region Board is tasked with accurately reviewing and approving annual progress reports. Also, they are instrumental in the approval process of any new solid waste permits for the region. At a minimum, having an active board that meets with regularity is vital to complete these tasks. The Planning Board is also needed to develop ten year plans, assess disposal capacity and collection assurance, provide for solid waste education, and assist in other aspects of integrated solid waste management. Duties and powers of the solid waste planning board are spelled out in T.C.A. §§ 68-211-813 thru 815.

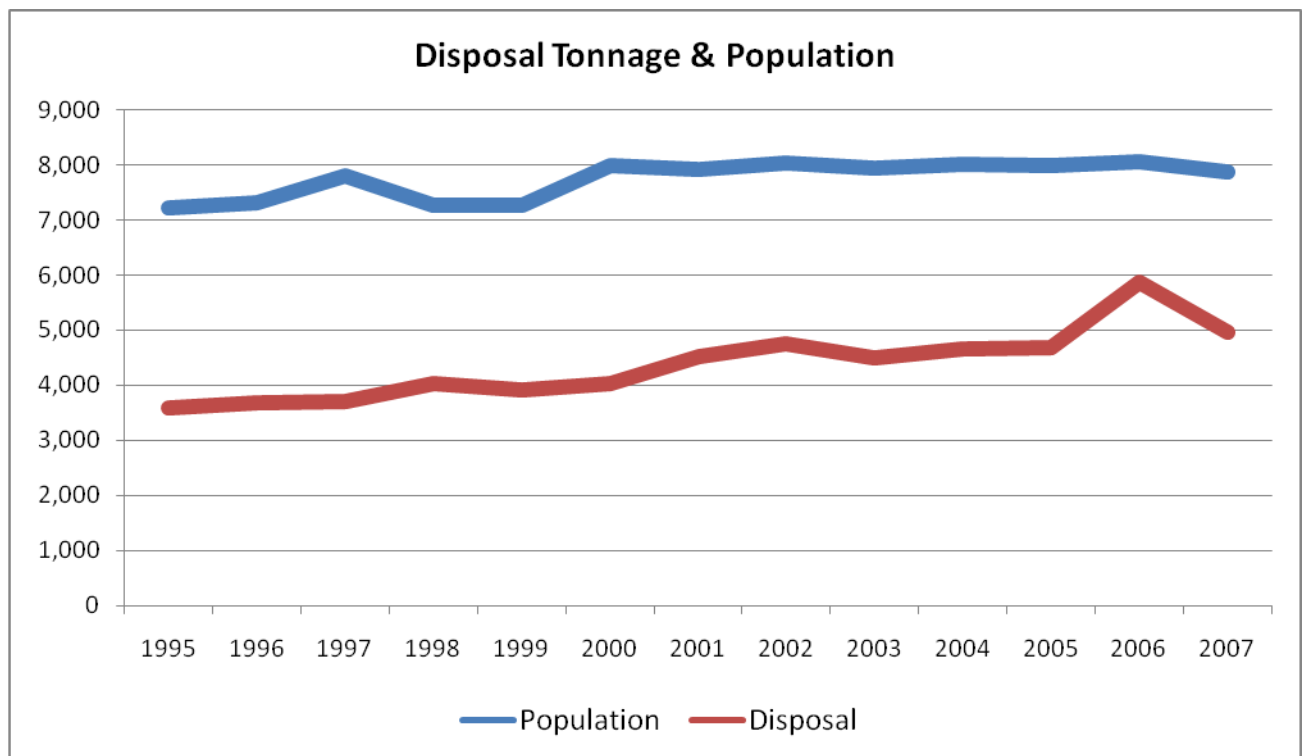
According to Clay County Mayor Dale Reagan, the solid waste planning board meets monthly to administer the solid waste activities of the region. The county needs to appoint replacements for any vacancies in a timely manner.



Fenced, Manned Pea Ridge Green Box Site

Statistics

<i>Year</i>	<i>Population</i>	<i>Disposal</i>	<i>Tons Per Capita</i>
1995	7,230	3,591	0.50
1996	7,323	3,685	0.50
1997	7,795	3,709	0.48
1998	7,273	4,022	0.55
1999	7,268	3,911	0.54
2000	7,976	4,023	0.50
2001	7,918	4,528	0.57
2002	8,021	4,745	0.59
2003	7,947	4,500	0.57
2004	8,006	4,655	0.58
2005	7,992	4,689	0.59
2006	8,055	5,870	0.73
2007	7,870	4,971	0.63



Analysis of local conditions

Clay County's reported Class I landfill disposal tonnage listed in the Annual Progress Reports (APR) has placed the region's per capita disposal between 0.5 and 0.59 tons per year for the period from 2000 through 2005. This range of values is consistent with the accepted 1995 base year disposal rate of 0.5. In 2006, the per capita ratio jumped to 0.73 tons per person per year as the reported landfill amounts increased 1,181 tons or 25% from the previous year. This increase in disposal correlates to 944 tons of waste reported by Volunteer Landfill in Scott County. This was the first time in several years that the region reported waste going to this landfill. Historically in the APR, the region has only reported utilizing Upper Cumberland Landfill.

A 25% reduction in Class I waste from the 1995 base year would require the region to achieve a disposal rate of 0.38 tons per person per year. For 2006, a 0.38 per capita disposal rate would translate into 2,951 tons of waste, while the region actually disposed of 5,870 tons. As an alternative, the Real-Time comparison method for measuring waste reduction is calculated by comparing all documented recycling and waste reduction programs against Class I landfill disposal. Therefore, the more documented waste reduction programs present in the region and the lower the Class I disposal, the higher the Real-Time measurement. In 2006, the region achieved a 20% Real-Time waste reduction rate.

Clay County Municipal Solid Waste Planning Region utilizes six public collection or "green box" locations to provide collection assurance to the majority of the county's land area. Only a few of these "green box" sites are fenced, thus allowing public access twenty-four hours a day. As of the date of the county visit, only one site was manned. Without oversight of the waste disposal activities of the citizens of the county at these "green box" locations, the following negative outcomes may result:

- Large amounts of out-of-county waste can enter Clay County's waste stream. This increases Clay County's solid waste expenditures, and increases the disposal tonnage.
- Clay County cannot control the types and amounts of waste deposited at these locations.
- On-site recycling education and waste separation cannot take place.
- Recyclable commodities that are placed in separate bins, when available, cannot be monitored for contamination, thus lowering the quality and the value of these commodities for future sale.
- Fewer recycling opportunities are available at the "green box" sites than at the convenience center.
- Accumulation of large quantities of litter and general uncontrolled dumping around the collection site.

Public collection or "green boxes" sites are referenced in T.C.A. § 68-211-851(d)(1), which states that no later than July 1, 1997, each county which maintains and uses receptacles for the collection of municipal solid waste from the general public at sites

separate from a convenience center for the needs of residents of the county shall submit to the Department the location and operational information of these locations.

T.C.A. § 68-211-851(d)(3) states that a county which did not have receptacles in use on January 1, 1996, or which subsequent to such date discontinues use of any receptacle permitted, shall be prohibited from installing or maintaining additional receptacles after July 1, 1996. According to documents dated June 24, 1997, and signed by Frank Halsell, Clay County Executive, the region operated seven “green box” sites: Butler Landing, Hermitage, Mt. Vernon, Pea Ridge, Rock Quarry, Willow Grove and Wood River. Butler Landing and Rock Quarry have ceased collection since 1997. The site in Free Hill was not listed in the above documentation submitted by the region, however the Department is in possession of a map indicating that Free Hill has been in operation since January 1, 1996. Upon receipt of written certification from the region that the Free Hill site has been operational since January 1, 1996 and that there have been no changes in the location, the site will be accepted. This will update Department records on the site that was left off in error in the above document.

The City of Celina, the largest population center in Clay County, did not provide assistance in recycling efforts in 2006. Celina provided for the curbside collection of municipal solid waste, thus adding to the disposal tonnage of the region, but did not first-hand provide for any waste reduction measures. Though not the only factor preventing further waste reduction, the lack of participation by Celina was a missed opportunity to significantly improve the waste reduction performance of the region.



County Convenience Center

Corrective Action

Within forty-five (45) days of receipt of this Assessment, submit to the Department certification confirming that the Free Hill site has been in operation prior to January 1, 1996 to update Department records.

Recommendations for improvement

After completion of this qualitative assessment, it has been determined that the following action steps should be implemented to help prevent future shortcomings in the region's progress towards reaching and maintaining the waste reduction and diversion goals:

- A more active role by the City of Celina to assist the region in waste reduction efforts would provide for expanded recycling opportunities to its residents (e.g., curbside recycling, centralized collection points, partnership with other governments, school and institutional programs) and help the region in general move towards continued compliance with the waste reduction goal. Report any new waste reduction programs instituted by the city in the regional Annual Progress Report.
- Standardize the waste reduction options provided at its existing waste collection points including the convenience center and "green box" sites. Provide dedicated and well marked recycling containers at each point. Improve the public participation and pride of the program to make a more efficient waste management system that produces higher profit yields on commodities recycled.
- Work to properly educate the public on the proper use of existing solid waste and waste reduction system infrastructure.
- Work with local schools and institutions to increase source separation of high value commodities such as paper products, food and beverage containers that will expand and improve existing recycling efforts.



Hermitage Green Box Site

Conclusion

T.C.A. § 68-211-861 requires each municipal solid waste planning region to achieve a twenty-five percent (25%) waste reduction goal for solid waste going to Class I landfills by December 31, 2003. Based on Clay County's reported Class I disposal and tons diverted, the region failed to meet the required reduction goal for calendar year 2006. This failure caused the Department to qualitatively assess Clay County Solid Waste Planning Region's solid waste reduction program's activities and expenditures to determine if it was qualitatively equivalent to other comparative counties that did reach the waste reduction goal.

Clay County Solid Waste Planning Region possesses programs, finances, infrastructure, education and staffing consistent with comparison regions. Furthermore, The Clay County Solid Waste Planning Region was superior to these regions due to the presence of a well run materials recovery facility that processed a substantial amount of commodities when considering the region's population size and financial status. After full review of the Clay County Municipal Solid Waste Planning Region, it has been determined that the region and its local governments are qualitatively equivalent to like regions and are making a good faith effort towards waste reduction.

